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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,436	06/28/2004	Toshiya Kiso	04414/LH	9327

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

VILLECCO, JOHN M

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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06/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/500,436

Applicant(s)

KISO, TOSHIYA

Examiner

John M. Villecco

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2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7,9,10 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,8,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/28/04, 3/9/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities:
 - On page 10, line 26, applicant refers to the digital video encoder as reference number 15. It is clear from Figure 2, that the digital video encoder is reference number 25, not 15.
 - On page 14, lines 2-3, applicant recites the phrase “touch panel 26”. This appears to be a typographical error and that the applicant meant to use the phrase – touch panel 26 –.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. More specifically, in claim 1

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applicant refers to the first and second direction designating units as reference number 26. The specification refers to reference number 26 as the touch panel. (See Figure 2) Therefore, the claim requires the touch panel to be both the first and second direction designating units. The claim language of claim 7 states that "the first and second direction-designating unit comprise an angle sensor". It is unclear how the touch panel of claim 1 can be both the touch panel and the angle sensor. Furthermore, one of ordinary skill in the art would not be enabled to make an touch panel to also be an angle sensor without undue experimentation.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 14-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 14 defines a storage medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed storage medium can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1, 2, 9, 10, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Katayama et al. (U.S. Patent No. 6,389,179).**

8. Regarding *claim 1*, Katayama discloses a image combining camera that uses captured angle data in order to combine images. More specifically, Katayama discloses a storage (image memory, 130) for storing first and second image data in a first and second photographing operation, a first and second direction designating unit (angle detector, 401) for designating a direction for the first and second image data, a direction comparing unit (controller, 172e) for

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comparing the designated directions, an image angle correcting unit (SD coordinate transformer, 172i or LD coordinate transformer, 172j), and an image composing unit (also SD coordinate transformer, 172i or LD coordinate transformer, 172j) for combining the two images. See column 32, line 35 to column 33, line 60 and column 13, line 45 to column 15, line 30.

9. As for **claim 2**, Katayama discloses that the detected angle from the angle detector (130) is written in a header portion of the image memory (130) for each image. See column 33, lines 5-10.

10. **Claim 9** is considered a method claim corresponding to claim 1. Please see the discussion of claim 1 above.

11. **Claim 10** is considered a method claim corresponding to claim 2. Please see the discussion of claim 2 above.

12. **Claim 14** is considered a storage medium claim corresponding to claim 1. Please see the discussion of claim 1 above.

13. **Claim 15** is considered a storage medium claim corresponding to claim 2. Please see the discussion of claim 2 above.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 5, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayama et al. (U.S. Patent No. 6,389,179).**

16. Regarding *claim 5*, as mentioned above in the discussion of claim 1, Katayama discloses all of the limitations of the parent claim. However, Katayama fails to explicitly disclose that the image composing unit deletes a portion of the combined image data which runs out of a predetermined frame and fills in a portion of the combined image data missing from the frame. Official Notice is taken as to the fact that it is well known in the art to delete portions of images that are being combined that fall outside of a display area and also to fill in image data that is missing from an image frame when combining images. This allows for an combined image to be properly formed on a display without a disjointed look. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to delete portions of an image or fill in portions of a combined image as need so that it can be displayed on a display without looking disjointed.

17. *Claim 13* is considered a method claim corresponding to claim 5. Please see the discussion of claim 5 above.

18. *Claim 18* is considered a storage medium claim corresponding to claim 5. Please see the discussion of claim 5 above.

Allowable Subject Matter

19. Claims 3, 4, 6, 8, 11, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 16 and 17 would be allowable if rewritten to

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overcome the 101 rejection and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3, 11, and 16, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest an image designating unit or step for designating either of the first image data and the second image data, wherein the image-angle correcting unit or step corrects the tilt of the image data designated by the designating unit or step so that the direction of the designated image data coincides with that of the other image data.

As for claims 4, 12, and 17, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the image angle correcting unit or step corrects the tilt of either the first or second image data by an arbitrary angle.

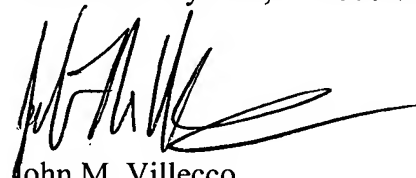
With regard to claim 6, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the first and second direction designating unit comprises a touch panel and designates the direction using coordinates with respect to positions on the touch panel where a user touches.

Regarding claim 8, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest wherein the first and second direction-designating unit comprise key buttons and designates a direction based on a direction of the depressed key button.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'John M. Villecco', with a long horizontal flourish extending to the right.

John M. Villecco
June 14, 2007